Application No.:

10/511,622

Amendment Dated:

October 23, 2008

Reply to Office Action of: July 25, 2008

Amendments to the Specification:

Please replace the paragraph, beginning at page 15, line 20, with the following rewritten paragraph:

MAT-8605US

The modulator 204 inputs transmission data, and impulse-modulates it according to a predetermined procedure. Impulse modulation is known including pulse-position modulation that is to superimpose information over pulse time interval, pulse-phase modulation that is to superimpose information over pulse phase, and pulse-amplitude modulation that is to superimpose information over pulse amplitude. In this manner, an impulse modulation wave is generated corresponding to transmission data, to output a subcarrier modulation signals in an amount of a predetermined number of subcarriers. The subscribers subcarriers are attached with the same symbol. The subcarrier modulation signals are inputted to the transmission sections 205, to be output as power-amplified subcarrier transmission signals therefrom. The power-amplified subcarrier transmission signals are inputted to the filter section 250 and bandlimited by the corresponding filters 201. The impulse modulation signal has a feature having a much-broadened band because it is an impulse-natured signal. Consequently, there is a feature that, even when passed through a narrower-banded filter having a different center frequency, there exists a corresponding frequency component. Thus, output is obtainable in accordance with a filter. Namely, the transmission signal outputted from the filter section 250 is such a signal as having a frequency characteristic shown in Fig. 3, in a state multiplexed with a plurality of subcarrier signals 201 to 207. The transmission signal is supplied to the antenna section 101, to radiate an electromagnetic wave by the radiation characteristic thereof.